In the Claims

Claims 1. – 42. (Cancelled)

43. (Currently Amended) A method of treating or preventing hepatocarcinomas comprising administering a therapeutically effective amount of a composition consisting essentially of comprising an active agent which stabilizes an actin network of a cellular cytoskeleton and wherein said active agent is selected from the group consisting of:

a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a functional fragment thereof,

an inhibitor of cofilin, and

a cyclic peptide.

44. (Currently Amended) A method of treating or preventing mesenchymal tumors comprising administering a therapeutically effective amount of the a composition comprising an active agent which stabilizes an actin network of a cellular cytoskeleton and wherein said active agent is selected from the group consisting of:

a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a functional fragment thereof,

an inhibitor of cofilin, and

a cyclic peptide according to claim 43 to a patient in need thereof.

45. (Currently amended) A method of treating or preventing neuroectodermal cancer comprising administering a therapeutically effective amount of the a composition comprising an

active agent which stabilizes an actin network of a cellular cytoskeleton and wherein said active agent is selected from the group consisting of:

a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a functional fragment thereof,

an inhibitor of cofilin, and

a cyclic peptide according to claim 43 to a patient in need thereof.

46. (Currently Amended) A method of treating or preventing Ewing's sarcoma comprising administering a therapeutically effective amount of the a composition comprising an active agent which stabilizes an actin network of a cellular cytoskeleton and wherein said active agent is selected from the group consisting of:

a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a functional fragment thereof,

an inhibitor of cofilin, and

a cyclic peptide according to claim 43 to a patient in need thereof.

47. (Currently Amended) A method of treating malignant hemopathies associated with chromosomal anomalies of region 7q34/q35 of a zyxin gene comprising administering a therapeutically effective amount of the a composition comprising an active agent which stabilizes an actin network of a cellular cytoskeleton and wherein said active agent is selected from the group consisting of:

a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a functional fragment thereof,

an inhibitor of cofilin, and

a cyclic peptide according to claim 43 to a patient in need thereof.

- 48. (Cancelled)
- 49. (Cancelled)
- 50. (Previously Presented) A method according to claim 43, wherein said active agent is selected from the group consisting of:

a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a function fragment thereof.

51. (New) A method according to claim 44, wherein said active agent is selected from the group consisting of:

a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a function fragment thereof.

52. (New) A method according to claim 45, wherein said active agent is selected from the group consisting of:

a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a function fragment thereof.

53. (New) A method according to claim 46, wherein said active agent is selected from the group consisting of:

a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a function fragment thereof.

54. (New) A method according to claim 47, wherein said active agent is selected from the group consisting of:

a zyxin protein or a polypeptide fragment thereof, a nucleic acid molecule comprising cDNA of a zyxin gene, a fragment thereof or a complementary sequence, or an antisense nucleic acid thereof, a cell or set of cells overexpressing the zyxin gene or a function fragment thereof.